

REMARKS

This is a full and timely response to the non-final Official Action mailed **November 24, 2003** (Paper No. 5). Reconsideration of the application in light of the above amendments and the following remarks is respectfully requested.

By the forgoing amendment, the specification and claims 1 and 11 have been amended. Additionally, new claims 21-50 have been added. No original claims have been cancelled. Thus, claims 1-50 are currently pending for further consideration.

With regard to the prior art, claims 1, 3-6, 8, 9, 11, 13-16, 18 and 19 were rejected as being anticipated under 35 U.S.C. § 102(a) by the Advanced Television Enhancement Forum Specification ("ATVEF"). For at least the following reasons, this rejection is respectfully traversed.

By way of introduction, Applicant notes that the ATVEF is entirely unrelated to the invention disclosed and claimed Applicant. The ATVEF describes a system for enhancing television programming that may be broadcast to, for example, a set-top box. Specifically, the ATVEF describes a system in which "Web content" is linked to a broadcast television program so that the Web content can be accessed by a user to in conjunction with the television program to enhance enjoyment of the television program.

The ATVEF does not teach or suggest anything about upgrading the programming or firmware of set-top terminal as does Applicant's specification. Claim 11 recites:

A system for controlling the downloading of code and data objects by a set-top terminal in a cable television system, the system comprising:
a set-top terminal connected to a cable television system; and
means for transmitting a download control message to said set-top terminal;

wherein said download control message specifies an object to be downloaded, a size of said object and a location of said object such that said set-top terminal is enabled to commence downloading said object upon receipt of said download control message; and

wherein said code or data object is added to firmware of said set-top terminal.
(emphasis added).

In contrast, the ATVEF does not teach or suggest the downloading of a code or data object where "said code or data object is added to firmware of said set-top terminal." "A claim is anticipated [under 35 U.S.C. § 102] only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). See M.P.E.P. § 2131. Therefore, for at least this reason, the rejection of claims 11-20 should be reconsidered and withdrawn. Newly added claims 21-31 are thought to be allowable over the prior art of record for at least the same reasons.

Claim 1 recites:

A method of controlling the downloading of code and data objects by a set-top terminal in a cable television system, the method comprising transmitting a download control message to said set-top terminal, wherein said download control message specifies an object to be downloaded, a ROMable size of said object and a location of said object such that said set-top terminal is enabled to commence downloading said object upon receipt of said download control message.
(emphasis added)

Support for the amendment to claim 1 can be found in Applicant's specification as originally filed on page 12.

In contrast, the ATVEF does not teach or suggest a download control message containing the ROMable size of an object to be downloaded. The ATVEF merely teaches

that the “an estimate of the high-water mark of cache storage in kilobytes that will be required during the playing of the enhancement” to the television program be transmitted to the set-top terminal. (ATVEF, p. 14). Because the ATVEF does not teach or suggest downloading programming that will become part of the firmware of the terminal, e.g., stored in the memory of the terminal, the ATVEF does not teach or suggest a download control message containing the ROMable size of an object to be downloaded.

As before, “[a] claim is anticipated [under 35 U.S.C. § 102] only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). See M.P.E.P. § 2131. Therefore, for at least this reason, the rejection of claims 1-10 should be reconsidered and withdrawn.

In the Office Action, claims 2, 10, 12 and 20 were rejected as unpatentable under 35 U.S.C. § 103(a) over the combined teachings of the ATVEF and U.S. Patent No. 5,951,639 to MacInnis. For at least the following reasons, this rejection is respectfully traversed.

As noted above, the ATVEF teaches a system for enhancing a broadcast television program by linking that program to “Web content.” The ATVEF does not address or teach anything regarding upgrading the programming in a set-top terminal. In contrast, MacInnis teaches “multicast downloading of software and data modules” to set-top boxes. (MacInnis, title). Thus, the two prior art references teach systems that are doing entirely different things.

Consequently, it would not have been obvious to one of skill in the art to combine any features of the MacInnis system with the system of the ATVEF. “If the proposed

modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)." M.P.E.P. § 2143.01.

Moreover, no explanation is given in the recent Office Action as to why one of skill in the art would have been motivated to transplant any element of the MacInnis system to the ATVEF system. "After indicating that the rejection is under 35 U.S.C. 103, the examiner should set forth in the Office action . . . an explanation why such proposed modifications would have been obvious to one of ordinary skill in the art at the time the invention was made." M.P.E.P. § 706.02(j). For at least these reasons, the rejection of claims 2, 10, 12 and 20 should be reconsidered and withdrawn. For at least these same reasons, new claims 32-41 should be considered patentable over the prior art of record.

Claim 4 further recites that "said [downloaded] object is a programming code object for execution by said set-top terminal, said method further comprising downloading said code object in accordance with said download control message." Claim 14 recites similar subject matter.

As described above, the ATVEF does not teach or suggest the download of a programming code object. Rather, the ATVEF teaches the provision of Web content to enhance a television show being broadcast. Consequently, for at least this additional reason, the rejection of claims 4-6 and 14-16 should be reconsidered and withdrawn. Claims 5, 6, 15

and 16 also each recite additional subject matter that is not taught or suggested by the prior art of record.

Claim 8 recites:

specifying, with said download control message, an operating environment of said set-top terminal in which said terminal is to respond to said download control message; and

downloading said object in accordance with said download control message only if said set-top terminal is in said operating environment specified by said download control message.

Claim 18 recites similar subject matter. Applicant's specification defines "operating environment" as being determined by whether "is the terminal running and controlled by a platform object or a system object." (Applicant's spec., p. 5).

In contrast, the ATVEF does not teach or suggest any determination of the "operating environment" as defined and claimed by Applicant. Consequently, the ATVEF cannot teach or suggest downloading an object only if the terminal has the right operating environment, i.e., is the terminal running and controlled by a platform object or a system object. For at least this additional reason, the rejection of claims 8 and 18 should be reconsidered and withdrawn.

Claim 9 recites "embedding said download control message in an entitlement management message that is transmitted from a headend facility to said set-top terminal."

Claim 19 recites similar subject matter.

As the Examiner may be aware, "entitlement management message" is a term of art in the cable television and broadcasting arts and such as message has a particular definition and meaning. In contrast, the ATVEF does not teach, suggest or even mention an entitlement management message. Consequently, the ATVEF cannot teach or suggest incorporating the claimed download control message in an entitlement management message. For at least this additional reason, the rejection of claims 9 and 19 should be reconsidered and withdrawn.

Claims 7 and 17 were rejected as unpatentable under 35 U.S.C. § 103(a) over the ATVEF taken alone. For at least the following reasons, this rejection is traversed.

Claim 7 recites: "downloading said object in accordance with said download control message; and terminating said downloading if a timer exceeds a set limit prior to receipt of a next successive data packet of said object." Claim 17 recites similar subject matter.

The Office Action concedes that the ATVEF does not teach or suggest the features of claims 7 and 17. This is because the ATVEF is directed to an entirely different function and does not include or address downloading a programming object to a set-top terminal.

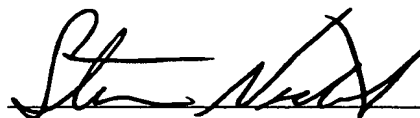
That notwithstanding, the Office Action alleges that the subject matter of claims 7 and 17 is still obvious in light of the ATVEF. This rejection is insufficient as a matter of law. Where the examiner relies on a single reference under § 103, it is insufficient to merely state that it would be obvious, or a mere matter of design choice, to modify the disclosure to include the features of the claimed invention. In re Mills, 16 USPQ2d 1430, 1432 (Fed. Cir. 1990). "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580

(CCPA 1974)." M.P.E.P. § 2143.03. (emphasis added). Accord. M.P.E.P. § 706.02(j).

Consequently, the rejection of claims 7 and 17 is fatally defective and should be supplemented or reconsidered and withdrawn.

For the foregoing reasons, the present application is thought to be clearly in condition for allowance. Accordingly, favorable reconsideration of the application in light of these remarks is courteously solicited. If any fees are owed in connection with this paper which have not been elsewhere authorized, authorization is hereby given to charge those fees to Deposit Account 18-0013 in the name of Rader, Fishman & Grauer PLLC. If the Examiner has any comments or suggestions which could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the number listed below.

Respectfully submitted,



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